


AMPEX
**SINGLE
CAPSTAN
SERIES**

now from **one** source, a **complete** family of
digital tape drives and tape memory systems
... with transfer rates from 1 to 120 KC



SINGLE CAPSTAN DRIVE...

reliability through simplicity

The heart of a digital tape memory is the **tape drive** and the functions of the drive are relatively simple: to start tape movement (in a forward or reverse direction) and bring it to a stop. However, today's third generation computing equipment requires more and more exacting performance in doing these simple tasks... with **more** thousands of hours between failure and less attention to maintenance. The trend in tape drive design, until the Ampex Single Capstan Series, tended to complicate existing mechanisms—increasing mechanical parts and decreasing reliability. Ampex **reversed this trend** with the highly simplified, single-servo-driven capstan that **directly controls all tape movement**... in a **low-friction** tape path... **without shock transients** as induced by pinch rollers, clutches, vacuum-gripping capstans and similar devices... with $\frac{1}{5}$ the parts of pinch roller drives. This single capstan principle, pioneered and developed by Ampex, is **now** incorporated in the entire family of ultra-reliable tape drives and tape memory systems outlined in this folder.

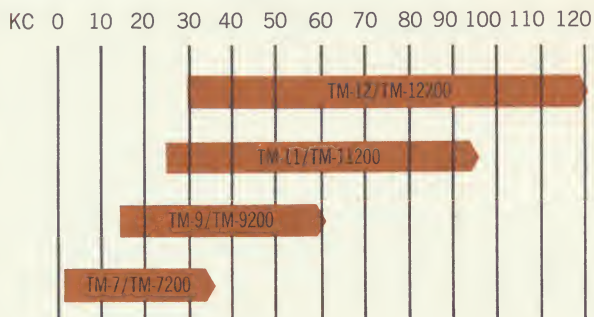
SINGLE CAPSTAN SERIES...

**meets all your data
transfer requirements**

The Ampex Single Capstan Series provides electronic data processors with a COMPLETE RANGE of interface interchangeable tape memories—with transfer rates from 1 to 120 KC. All tape drives and systems of the series offer FIELD PROVEN RELIABILITY—at least 2,000 hours MTBF, at least ONE BILLION start/stop operations before replacement parts may be needed in the drive mechanism. During data reliability tests on these transports, 33 data blocks of 1024 characters (all "1's" in IBM format) were recorded at 800 cpi. These blocks were re-read cyclically; over 160,000 passes were made of the test tape without a single character error being detected!

All units of the series are interface interchangeable with each other...you can choose the drives to match your requirements...intermix them...and easily exchange drives if requirements change. All tape memories of the series use the versatile Ampex DE-200 Data Electronics. All Single Capstan units write and read IBM compatible 7-track (0.75 inch IRG) or ASCII 9-track (0.6 inch IRG) tape formats; all have universal power inputs with voltage taps from 100 to 250 VAC, 48 to 62 cps.

SINGLE CAPSTAN SERIES TRANSFER RATES



Gentlemen:

Please send me detailed information on the following Single Capstan Equipment:

- ☐ TM-7/TM-7200 ☐ TM-9/TM-9200
- ☐ TM-11/TM-11200 ☐ TM-12/TM-12200
- ☐ Other _____
- ☐ Please have a representative call. I am interested in _____

name _____ title _____

organization _____

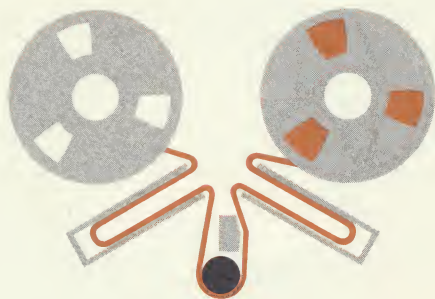
address _____

city _____ state _____ zip _____

AMPEX **AMPEX CORPORATION**

401 Broadway • Redwood City • California • 94063

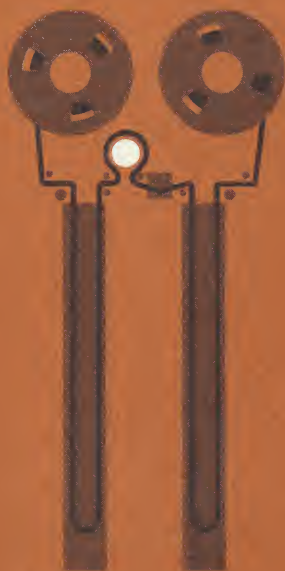
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Standard configuration for the TM-7 and TM-9 tape drives, TM-7200 and TM-9200 tape memory systems, is this attractive console cabinet. Outside dimensions of the console are: 46" high x 28 $\frac{1}{4}$ " wide x 21" deep. Both units are also suitable for mounting in standard 19" rack.



AMPEX SINGLE CAPSTAN



Standard rack-mount configuration for the TM-11 and TM-12 tape drives, TM-11200 and TM-12200 tape memory systems. Mounting dimensions for tape drives alone: 24" wide x 59 $\frac{1}{2}$ " high x 24" deep. Drives or tape memory systems in Ampex enclosure measure 68 $\frac{1}{2}$ " high x 28 $\frac{1}{2}$ " wide x 29" deep.



MODERATE TRANSFER RATES 1-60 KC

TM-7 Tape Drive

TM-7200 Tape Memory System

- **Transfer Rates:** 1 - 35 KC
- **Tape Densities:** 200, 556, 800 cpi
- **Tape Speeds:** 36 ips standard speed (Optional speeds available from 5 ips to 45 ips, also Variable Speed Model and Incremental Drive Model.)
- **Start/Stop Time:** 10 milliseconds maximum at 36 ips
- **Rewind Time:** 2400 feet in less than three minutes; tape remains in vacuum chambers **during** rewind

TM-9 Tape Drive

TM-9200 Tape Memory System

- **Transfer Rates:** 15 - 60 KC
- **Tape Densities:** 200, 556, 800 cpi
- **Tape Speeds:** 75 ips standard speed, multiple speeds optional
- **Start/Stop Time:** 6.5 milliseconds maximum at 75 ips
- **Rewind Time:** 2400 feet in less than 2¼ minutes; tape remains in vacuum chambers **during** rewind

SERIES AT A GLANCE...

HIGH TRANSFER RATES 25-120 KC

TM-11 Tape Drive

TM-11200 Tape Memory System

- **Transfer Rates:** 25 - 96 KC
- **Tape Densities:** 200, 556, 800 cpi
- **Tape Speeds:** 75, 112.5, 120 ips (one speed is standard, multiple speed models optional)
- **Start/Stop Time:** 3.8 milliseconds max. at 120 ips
- **Rewind Time:** 2400 feet in two minutes; tape remains in vacuum chambers **during** rewind

TM-12 Tape Drive

TM-12200 Tape Memory System

- **Transfer Rates:** 30 - 120 KC
- **Tape Densities:** 200, 556, 800 cpi
- **Tape Speeds:** 150 ips standard speed, multiple speeds optional
- **Start/Stop Time:** 3.0 milliseconds max. at 150 ips
- **Rewind Time:** 2400 feet in less than 1¾ minutes; tape remains in vacuum chambers **during** rewind